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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,787	12/01/2003	Gianluca Paladini	2002P19673 US01	1913

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Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

RICHER, AARON M

ART UNIT	PAPER NUMBER
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2628

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08/25/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/724,787	Applicant(s) PALADINI, GIANLUCA	
	Examiner AARON M. RICHER	Art Unit 2628	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 06 August 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☒ Applicant's reply has overcome the following rejection(s): See Continuation Sheet.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: 10 and 23.
- Claim(s) objected to: 8 and 21.
- Claim(s) rejected: 1-7,9,11-20,22 and 24-27.
- Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Aaron M Richer/
Examiner, Art Unit 2628

Continuation of 5. Applicant's reply has overcome the following rejection(s): 35 USC 101 rejection of claims 14-20 and 22-27 and 112 rejection of claims 1-9 and 11-13 .

Continuation of 11. does NOT place the application in condition for allowance because: Examiner notes that examiner has already responded to the non-italicized portions of applicant's arguments in previous Office Actions. Applicant further argues that Halmann is not configured for reverse lookup (conversion from Cartesian to polar). However, examiner notes that regardless of how lookup occurs, Halmann is identifying ultrasound data as a function of conversion values and interpolates display values from the data, as claimed.

Applicant further argues neither Seiler nor Halmann connects the concept of avoiding scan conversion with reverse lookup. However, 35 USC 103 does not require every limitation to appear in the same reference. Since Seiler teaches avoiding scan conversion with the advantage of enhancing efficiency, and Halmann discloses lookup between ultrasound and display data, the references combine to teach the limitations of the claim.

Applicant further argues that Seiler identifies voxels that are or are not visible regardless of display coordinates. However, claim 1 does not specify that the display coordinates are involved in the visibility decision.

Applicant further argues that Seiler does not provide a way for implementing the visibility decision in Halmann and could only be used in the rendering part of Halmann. However, examiner notes that it is not the actual bodily incorporation of the references that is relevant here. Rather, the teachings of Seiler could be brought in to the scan conversion of Halmann to improve efficiency.

Applicant further argues that claim 1 describes scan conversion during volume rendering rather than before as taught by Halmann. However, it appears from col. 5, lines 35-40 that Halmann considers the entire process the "rendering" process, since scan conversion is handled in the volume rendering module.

Applicant further argues that Seiler is relying on volume data that already exists before rendering takes place, but, as noted above, Halmann appears to consider the entire scan conversion plus display process to be part of "rendering".

Applicant further argues that claim 1 is implicitly view-dependent, but even if this is the case, it appears that view-independent techniques could still be used in a view-dependent invention. Determining visibility is done in both cases.

As to claim 2, applicant argues that the Cartesian coordinates in claim 2 are converted to Polar coordinates, but this has been addressed in examiner's comments regarding claim 1.

As to claim 3 and 16, applicant argues that Halmann does not provide for identifying acquired data by input of determined display coordinates, but this has also been addressed in examiner's comments regarding claim 1.

As to claims 5 and 18, applicant argues that Halmann treats rendering and scan conversion separately. However, examiner notes that Halmann considers the entire process rendering as noted above. Similar comments can apply to the arguments regarding claims 26, 4, 6, and 19.

As to claims 9 and 22, applicant argues that Swerdloff does not teach a method for selective scan conversion of volume data. However, such selective scan conversion is not claimed in claim 9. It is further noted that the combination of Seiler with Halmann and Swerdloff would introduce such selective scan conversion of only visible portions of a volume, as described in the rejection to claim 1.

As to claim 12, applicant argues that a flag and integer sum efficiently track visibility for a reverse lookup. However, applicant has not demonstrated why a user would use such specific variables and not others, such as floating point variables, etc. Since other variables would appear to work equally well, the use of an integer sum and flag appear to be design choices .